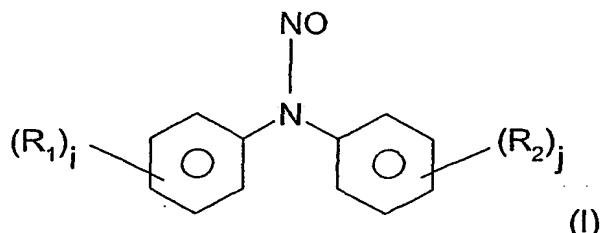


CLAIMS

## 1. Compounds of the formula I



5

in which:

- R<sub>1</sub> represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an alkylcarbonyl group; a carboxyl group; an alkylcarbonylamino group; an alkylsulfonyl group;
- R<sub>2</sub> represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxy carbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxy carbonyl or unsubstituted amide group;
- i and j independently being 1 to 5,

with the exclusion of the compound for which i and j = 1 and R<sub>1</sub> = carboxyl and R<sub>2</sub> = alkoxy carbonyl or R<sub>1</sub> = CF<sub>3</sub> and R<sub>2</sub> = carboxyl; and also the pharmaceutically acceptable derivatives, salts, solvates and stereoisomers thereof, including mixtures thereof in all proportions.

2. Compounds according to formula (I) of Claim 1, in which the aliphatic hydrocarbon-based group is a linear or branched C<sub>2</sub>-C<sub>10</sub> alkyl group optionally substituted by halogen, nitro, cyano, amino, mono- or dialkylamino, carboxyl, acylamino or alkylsulfonyl.

3. Compounds according to formula (I) of Claim 1 or 2, in which the halogen is fluorine.

4. Compounds according to formula (I) of one of Claims 1 to 3, in which R<sub>1</sub> represents, independently of each other, -OCH<sub>3</sub>, -SCH<sub>3</sub>, -OCF<sub>3</sub>, -N(CH<sub>3</sub>)<sub>2</sub>, -COCH<sub>3</sub> or methylsulfonyl.

5

5. Compounds of the formula (I) according to one of Claims 1 to 4, in which R<sub>2</sub> represents, independently of each other, cyano, -CH<sub>2</sub>OH, -COCH<sub>3</sub>, -COOH, -CH<sub>2</sub>COOH, -COOCH<sub>3</sub>, -COOC<sub>2</sub>H<sub>5</sub> or CONH<sub>2</sub>.

10 6. Compounds of the formula (I) according to one of Claims 1 to 5, in which i = 1.

7. Compounds of the formula (I) according to one of Claims 1 to 6 in which j = 1.

15

8. Compounds of the formula (I) according to one of Claims 1 to 7, in which at least one R<sub>1</sub> is in position 3 or 4 on the phenyl ring.

9. Compounds of the formula (I) according to one of Claims 1 to 8, in  
20 which at least one R<sub>2</sub> is in position 3 or 4 on the phenyl ring.

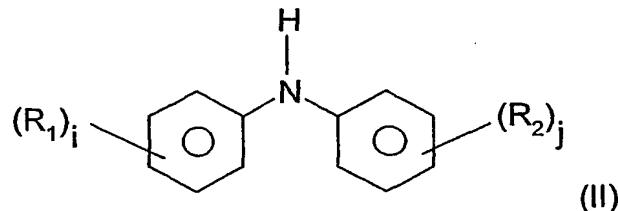
10. Compounds of the formula (I) according to one of Claims 1 to 9, chosen from the following compounds:

- 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
- 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;
- Ex. 9-29;
- N-nitrosodiphenylamine-4,4'-dicarboxylic acid;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
- 4-[(4-(methylthio)phenyl)(nitroso)amino]benzoic acid;
- {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;

- {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
- 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
- 5 - (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
- {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
- 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
- 10 - 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
- 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
- 1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
- {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
- 15 - (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;
- N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
- {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
- {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
- 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.

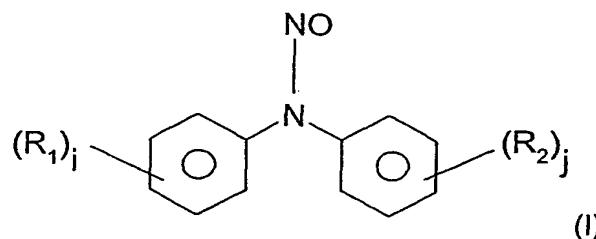
20

11. Process for the preparation of a compound of the formula (I) according to one of Claims 1 to 10, comprising the reaction of a compound of the formula (II):



25 in which R<sub>1</sub>, R<sub>2</sub>, i and j are as defined for formula (I) in Claim 1, with a nitrosating agent.

12. Pharmaceutical composition comprising a compound of the formula (I)



in which:

- R<sub>1</sub> represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an acylamino group, an alkylcarbonyl group; a carboxyl group; an unsubstituted amide group; an alkylsulfonyl group;
- R<sub>2</sub> represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxy carbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxy carbonyl or unsubstituted amide group;
- i and j independently being 1 to 5,

5 with the exclusion of the compound for which i and j = 1 and R<sub>1</sub> = carboxyl and R<sub>2</sub> = alkoxy carbonyl or R<sub>1</sub> = CF<sub>3</sub> and R<sub>2</sub> = carboxyl;  
10 and also the pharmaceutically acceptable derivatives, salts, solvates and stereoisomers thereof, including mixtures thereof in all proportions.

15 13. Composition according to Claim 12, in which the aliphatic hydrocarbon-based group is a linear or branched C<sub>2</sub>-C<sub>6</sub> alkyl group optionally substituted by halogen, nitro, cyano, amino, mono- or dialkylamino, carboxyl, unsubstituted amide; alkylsulfonyl.

20 14. Composition according to Claim 12 or 13, in which the halogen is fluorine.

15. Composition according to either of Claims 13 and 14, in which R<sub>1</sub> represents, independently of each other, -OCH<sub>3</sub>, -SCH<sub>3</sub>, -OCF<sub>3</sub>, -N(CH<sub>3</sub>)<sub>2</sub>, -COCH<sub>3</sub>, methylsulfonyl.

5 16. Composition according to one of Claims 13 to 15, in which R<sub>2</sub> represents, independently of each other, cyano, -CH<sub>2</sub>OH, -COCH<sub>3</sub>, -COOH, -CH<sub>2</sub>COOH, -COOCH<sub>3</sub>, -COOC<sub>2</sub>H<sub>5</sub> or unsubstituted amide.

10 17. Composition according to one of Claims 13 to 16, in which i = 1.

18. Composition according to one of Claims 13 to 17, in which j = 1.

19. Composition according to one of Claims 13 to 18, in which at least one R<sub>1</sub> is in position 3 or 4 on the phenyl ring.

15 20. Composition according to one of Claims 13 to 19, in which at least one R<sub>2</sub> is in position 3 or 4 on the phenyl ring.

20 21. Composition according to one of Claims 13 to 20, in which the compound of the formula (I) is chosen from the following compounds:

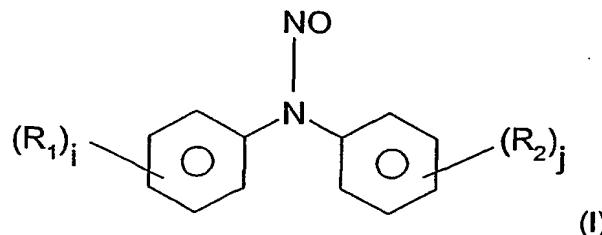
- 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
- 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;
- ethyl 4-[(4-nitrophenyl)(nitroso)amino]benzoate;
- ethyl 4-[(4-cyanophenyl)(nitroso)amino]benzoate;
- ethyl 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoate;
- ethyl 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoate;
- 4-[(4-nitrophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoic acid;
- 3-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;

- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 1-{4-[(4-methoxyphenyl)(nitroso)amino]phenyl}ethanone;
- 4-[(4-fluorophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 5 - 4-[(3-fluorophenyl)(nitroso)amino]benzoic acid;
- {4-[(3-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
- {4-[(4-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
- 3-[(3-methoxyphenyl)(nitroso)amino]benzoic acid;
- 4-[(3-methylphenyl)(nitroso)amino]benzoic acid;
- 10 - 4-[(3-chlorophenyl)(nitroso)amino]benzoic acid;
- 3-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzonitrile;
- 3-[(4-acetylphenyl)(nitroso)amino]benzonitrile;
- N-nitrosodiphenylamine-4,4'-dicarboxylic acid;
- 15 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
- 4-[[4-(methylthio)phenyl](nitroso)amino]benzoic acid;
- {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;
- {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
- 20 - 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
- (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
- {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
- 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;
- 25 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
- 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
- 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
- 30 - 1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
- {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
- (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;

- N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
- {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
- {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
- 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.

5

22. Use of a compound of the formula (I)



in which:

- R<sub>1</sub> represents, independently of each other, a halogen atom; an aliphatic hydrocarbon-based group optionally substituted and/or optionally interrupted by one or more oxygen or sulfur atoms; a nitro group; a cyano group; an amino group; a mono- or dialkylamino group; an acylamino group, an alkylcarbonyl group; a carboxyl group; an unsubstituted amide group; an alkylsulfonyl group;
- R<sub>2</sub> represents, independently of each other, a cyano group; a hydroxyl group, an alkylcarbonyl group; a carboxyl group; an alkoxy carbonyl group; an unsubstituted amide group; or a linear or branched alkyl group substituted by a cyano, hydroxyl, carboxyl, alkoxy carbonyl or unsubstituted amide group;
- i and j independently being 1 to 5,

and also the pharmaceutically acceptable derivatives, salts, solvates and stereoisomers thereof, including mixtures thereof in all proportions.

23. Use according to Claim 22, in which the compound of the formula (I) is chosen from the following compounds:

- 4-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
- 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoic acid;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzonitrile;
- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}methanol;

- ethyl 4-[(4-nitrophenyl)(nitroso)amino]benzoate;
- ethyl 4-[(4-cyanophenyl)(nitroso)amino]benzoate;
- ethyl 4-{nitroso[4-(trifluoromethyl)phenyl]amino}benzoate;
- ethyl 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoate;
- 5 - 4-[(4-nitrophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzoic acid;
- 3-[(4-methoxyphenyl)(nitroso)amino]benzoic acid;
- {4-[(4-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 10 - 1-{4-[(4-methoxyphenyl)(nitroso)amino]phenyl}ethanone;
- 4-[(4-fluorophenyl)(nitroso)amino]benzoic acid;
- 4-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 4-[(3-fluorophenyl)(nitroso)amino]benzoic acid;
- {4-[(3-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
- 15 - {4-[(4-fluorophenyl)(nitroso)amino]phenyl}acetic acid;
- 3-[(3-methoxyphenyl)(nitroso)amino]benzoic acid;
- 4-[(3-methylphenyl)(nitroso)amino]benzoic acid;
- 4-[(3-chlorophenyl)(nitroso)amino]benzoic acid;
- 3-[(4-acetylphenyl)(nitroso)amino]benzoic acid;
- 20 - 4-[[4-(methylsulfonyl)phenyl](nitroso)amino]benzonitrile;
- 3-[(4-acetylphenyl)(nitroso)amino]benzonitrile;
- N-nitrosodiphenylamine-4,4'-dicarboxylic acid;
- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzoic acid;
- 4-[[4-(methylthio)phenyl](nitroso)amino]benzoic acid;
- 25 - {4-[(4-chlorophenyl)(nitroso)amino]phenyl}acetic acid;
- {4-[(3-methoxyphenyl)(nitroso)amino]phenyl}acetic acid;
- 4-[[4-(acetylamino)phenyl](nitroso)amino]benzoic acid;
- 4-[(3-cyanophenyl)(nitroso)amino]benzoic acid;
- 4-[[3-(aminocarbonyl)phenyl](nitroso)amino]benzoic acid;
- 30 - (4-{nitroso[4-(trifluoromethyl)phenyl]amino}phenyl)acetic acid;
- {4-[[4-(methylsulfonyl)phenyl](nitroso)amino]phenyl}acetic acid;
- 4-[(3-chlorophenyl)(nitroso)amino]benzonitrile;

- 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzonitrile;
- 4-[(4-methoxyphenyl)(nitroso)amino]benzamide;
- 4-[(4-nitrophenyl)(nitroso)amino]benzamide;
- 4-[(4-fluorophenyl)(nitroso)amino]benzamide;
- 5 - 4-{nitroso[4-(trifluoromethoxy)phenyl]amino}benzamide;
- 1-{4-[(4-chlorophenyl)(nitroso)amino]phenyl}ethanone;
- {4-[(4-fluorophenyl)(nitroso)amino]phenyl}methanol;
- (4-{nitroso[4-(trifluoromethoxy)phenyl]amino}phenyl)methanol;
- N-{4-[[4-(hydroxymethyl)phenyl](nitroso)amino]phenyl}acetamide;
- 10 - {4-[(3-chlorophenyl)(nitroso)amino]phenyl}methanol;
- {4-[(3-methylphenyl)(nitroso)amino]phenyl}methanol;
- 3-[(4-fluorophenyl)(nitroso)amino]benzoic acid.

24. Use according to Claim 22 or 23, for the preparation of a medicament  
15 that is useful for the treatment of and preventing diabetes and/or metabolic insulin-resistance syndrome.

25. Use according to Claim 22 or 23, for the preparation of a hypotriglyceridaemic medicament.